

Claims

I claim:

1. A method for controlling native applications using Open Service Gateway Initiative (OSGi)

bundles, comprising:

packaging a native application within an OSGi bundle to create a link between the OSGi bundle and the native application;

installing the OSGi bundle within an OSGi environment of a client device after the packaging;

deploying the OSGi bundle within a native environment of the client device; and

controlling the native application within the native environment using the OSGi bundle within the OSGi environment.

2. The method of claim 1, wherein the controlling step comprises managing a life cycle of the native application.

3. The method of claim 2, wherein the managing step comprises performing an action selected from the group consisting of starting the native application, stopping the native application, installing the native application and uninstalling the native application.

4. The method of claim 2, wherein the managing step comprises:
- issuing a life cycle command from a management program loaded on a server;
 - receiving the life cycle command in the OSGi bundle on the client device; and
 - executing the life cycle command on the native application through an agent on the client device.
5. The method of claim 4, wherein the agent is a WIN-32 agent within the OSGi environment and wherein the native application is a WIN-32 application.
6. The method of claim 1, wherein the native application is packaged within the OSGi bundle on a server, and wherein the installing step comprises exporting the OSGi bundle from the server to the client device.
7. The method of claim 1, further comprising removing the native application from within the OSGi bundle while maintaining the link, after the deploying step.

8. A method for enabling life cycle management of native applications using Open Service

Gateway Initiative (OSGi) bundles, comprising:

packaging a native application within an OSGi bundle on a server to create a link between the OSGi bundle and the native application;

installing the OSGi bundle within an OSGi environment of a client device after the packaging;

deploying the OSGi bundle within a native environment of the client device;

removing the native application from within the OSGi bundle while maintaining the link;

and

managing a life cycle of the native application within the native environment using the OSGi bundle within the OSGi environment.

9. The method of claim 8, wherein the managing step comprises:

issuing a life cycle command from a management program loaded on the server;

receiving the life cycle command in the OSGi bundle; and

executing the life cycle command to manage the life cycle of the native application.

10. The method of claim 9, wherein the executing step comprises the OSGi bundle instructing an agent to manage the life cycle of the native application based on the life cycle command.

11. The method of claim 10, wherein the agent is a WIN-32 agent within the OSGi environment.

12. The method of claim 8, wherein the managing step comprises performing an action selected from the group consisting of starting the native application, stopping the native application, installing the native application and uninstalling the native application.

13. A system for controlling native applications using Open Service Gateway Initiative (OSGi) bundles, comprising:

a packaging system for packaging a native application within an OSGi bundle to create a link between the OSGi bundle and the native application;

an exportation system for installing the OSGi bundle within an OSGi environment of a client device, wherein the OSGi bundle is thereafter deployed within a native environment of the client device; and

a control system for controlling the native application within the native environment using the OSGi bundle within the OSGi environment.

14. The system of claim 13, wherein the system for controlling native applications is embodied within a management program loaded on a server.

15. The system of claim 13, wherein control system controls issues a life cycle command to manage a life cycle of the native application, wherein the life cycle command is received by the OSGi bundle on the client, and wherein the OSGi bundle instructs an agent within the OSGi environment to carry out the command.

16. The system of claim 15, wherein the life cycle is managed by performing an action selected from the group consisting of starting the native application, stopping the native application, installing the native application and uninstalling the native application.

17. The system of claim 13, further comprising a deployment system for deploying the OSGi bundle is deployed within the native environment.
18. The system of claim 17, wherein the deployment system is loaded on the server.
19. The system of claim 17, wherein the deployment system is loaded on the client device.
20. The system of claim 13, further comprising a removal system for removing the native application from the OSGi bundle after deployment within the native environment.
21. The system of claim 20, wherein the removal system is loaded on the server.
22. The system of claim 20, wherein the removal system is loaded on the client device.

23. A system for controlling native applications using Open Service Gateway Initiative (OSGi) bundles, comprising:

means for packaging a native application within an OSGi bundle to create a link between the OSGi bundle and the native application;

means for installing the OSGi bundle within an OSGi environment of a client device;

means for deploying the OSGi bundle within a native environment of the client device;

means for removing the native application from within the OSGi bundle while maintaining the link; and

means for managing a life cycle of the native application within the native environment using the OSGi bundle within the OSGi environment.

24. The system of claim 23, wherein the system for controlling native applications is embodied within a management program loaded on a server.

25. The system of claim 23, wherein the means for managing issues a life cycle command to manage a life cycle of the native application, wherein the life cycle command is received by the OSGi bundle on the client, and wherein the OSGi bundle instructs an agent within the OSGi environment to carry out the command.

26. The system of claim 23, wherein the life cycle is managed by performing an action selected from the group consisting of starting the native application, stopping the native application, installing the native application and uninstalling the native application.

27. A program product stored on a recordable medium for controlling native applications using Open Service Gateway Initiative (OSGi) bundles, which when executed, comprises:

program code for packaging a native application within an OSGi bundle to create a link between the OSGi bundle and the native application;

program code for installing the OSGi bundle within an OSGi environment of a client device, wherein the OSGi bundle is thereafter deployed within a native environment of the client device; and

program code for controlling the native application within the native environment using the OSGi bundle within the OSGi environment.

28. The program product of claim 27, wherein the program product is embodied within a management program loaded on a server.

29. The program product of claim 27, wherein the program code for controlling issues a life cycle command to manage a life cycle of the native application, wherein the life cycle command is received by the OSGi bundle on the client, and wherein the OSGi bundle instructs an agent within the OSGi environment to carry out the command.

30. The program product of claim 29, wherein the life cycle is managed by performing an action selected from the group consisting of starting the native application, stopping the native application, installing the native application and uninstalling the native application.

31. The program product of claim 27, further comprising program code for deploying the OSGi bundle within the native environment.

32. The program product of claim 31, wherein the program code for deploying is loaded on the server.

33. The program product of claim 31, wherein the program code for deploying is loaded on the client device.

34. The program product of claim 27, further comprising program code for removing the native application from within OSGi bundle after the OSGi bundle is deployed within the native environment.

35. The program product of claim 34, wherein the program code for removing is loaded on the server.

36. The program product of claim 34, wherein the program code for removing is loaded on the client device.